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Alternatives to Hazardous Household Products

When someone mentions hazardous products, you may not think of things that you have at home. However, many products like drain cleaners, bug spray, nail polish remover, shoe polish, oil, paint, and turpentine, can pollute the environment. Improper use and disposal of some of these products can also harm you or your family, especially small children. One way to reduce the risk to yourself and your family is to use hazardous household products only when necessary. Fortunately, other choices are available. This document provides basic information on some of these alternatives. Additional information on environmentally friendly cleaning products can be found on the Web at <http://foe.org/eday99/cleaners.html> or <http://www.ecomall.com/greenshopping/mtngreen.htm>.

If they are used or disposed of improperly, even products sold as "environmentally-friendly" can sometimes cause pollution and can poison you or your children. Before you use or dispose of any household chemical you should read the label. The label contains instructions on how to safely use the product and often contains guidelines on proper disposal. You can also call the manufacturer's phone number on the label to get more information.

Type of product	Major problems	Possible alternatives
Drain cleaners	Lye and acids can burn human tissue; some products can explode if used incorrectly; particularly dangerous around children	To clear clogs: Pour 2 cup of baking soda and 2 cup vinegar down the drain. Let sit for one minute and flush with hot water. Use a metal snake for persistent clogs. Keep drains clean by using a drain strainer and flushing weekly with a mixture of 2 cups salt and 1/8 cup cream of tartar followed by hot water.
Oven cleaners	Lye and acids can burn human tissue. Some products can explode if used incorrectly. Particularly dangerous around children.	Protect oven floor from spills with aluminum foil or other oven liner. Clean stains by mixing 2 tablespoons liquid dish soap, 2 teaspoons borax, and 2 cups warm water; apply and let sit for 20 minutes, then scrub with steel wool and non-chlorine scouring power. For fresh spills, pour on lots of salt when warm and scrub off the next day.
Toilet cleaners	Often contain chlorine and strong acids. Highly poisonous if swallowed. Fumes can be dangerous.	Clean and deodorize with 2 cups borax and 1 gallon warm water. If bowl is stained, coat with a paste of lemon juice and borax, let sit about 20 minutes, and scrub with a bowl brush.
Surface cleaners	Products often contain either chlorine or ammonia; both are poisonous is swallowed. If chlorine and ammonia are mixed together, they form deadly chloramine gas.	General cleaning: Use 2 cups washing soda or borax per bucket of hot water. Scouring: Use a paste of baking soda and warm water then scrub with a damp cloth or scouring pad.
Glass/window cleaners	Often contain ammonia, which is poisonous if swallowed. Fumes can cause irritation.	Use 1 cup vinegar in 1 quart water; rub dry with newspaper or squeegee to prevent streaking.

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Type of product	Major problems	Possible alternatives
Mold/mildew cleaners	Contain pesticides. Chemicals usually harmful if swallowed or inhaled.	Wash bath and sink grout often so mold and mildew can't get established, seal with water sealer. To inhibit mold and mildew, wash area with 2 cups borax and 1 gallon hot water. Scrub mildew spots with borax/water mix and scouring pad. To clean mildew from a shower curtain use vinegar full strength or use 2 cups borax to 1 gallon hot water.
Furniture and floor polishes	Contain petroleum distillates and/or phenols. Often flammable and very dangerous if swallowed. May have strong, lingering odors. Some may cause skin irritation.	Furniture polish: Combine equal parts mineral oil and lemon oil (do not melt over open flame). Wood floors: Combine equal parts mineral oil and vinegar. Linoleum or tile floors: Mix ¼ cup white vinegar, ¼ cup washing soda, and 1 gallon warm water; apply with damp mop. Scrub scuff marks with toothpaste.
Metal polishes	Fumes pollute the air in your home. They are strong acids so must be disposed of as hazardous waste.	Silver: Boil in 2 quarts of water with 1 teaspoon baking soda, 1 teaspoon salt, and a piece of aluminum foil. Polish with a paste of baking soda and water. Brass: Polish with a paste of equal parts salt and flour with a little vinegar. Copper: Rub with lemon juice or with hot vinegar and salt. Chrome: Use rubbing alcohol or white flour on a dry rag. Aluminum: Dip a cloth in lemon juice, polish, then rinse with warm water.
Detergents	Phosphates in many detergents cause water pollution that can harm aquatic life	Use as little detergent as possible for laundry and dishes; use low- or no-phosphate detergents; use soaps like laundry soap where possible. You can use borax to increase the effectiveness of soap if you have hard water.
Paint (non-latex)	Lead-based paint can cause lead poisoning if paint chips or dust are eaten, especially by small children. Other solvents can cause water pollution.	Use water-based latex paints if possible. Non-latex paints should be used up or disposed of as hazardous waste (see HAPPI-Home 5 for additional information).
Turpentine, paint thinner	These chemicals can move rapidly through the soil and contaminate ground waters. Fumes can cause harm, especially in enclosed spaces. Highly poisonous if consumed, especially to small children.	Always use according to directions. Strain and reuse thinners and turpentine. Always keep covered to avoid evaporation. Should always be disposed of as household hazardous waste (see HAPPI-Home 5 for additional information).
Aerosol cans	Solvents and propellants used can contaminate ground and surface waters. Cans are potentially explosive if disposed of incorrectly	Purchase equivalent products in non-aerosol forms including roll-ons, creams, and sticks for deodorants and pump sprays, creams and gels for hair care products. Good ventilation, regular cleaning and fresh flowers or potpourri can reduce the need for air fresheners.

This HAPPI document was adapted by Michael Robotham, Carl Evensen, and Linda J. Cox based on information from *Alternatives to household hazardous products* published by the Pollution Prevention Program of the Hawaii State Department of Health and from CTAHR extension publications WQ-#7, WQ-#8, and WQ-#9, June 1992, developed by Alyson McCann. HAPPI-Home materials are produced by the Hawaii's Pollution Prevention Information (HAPPI) project (Farm•A•Syst/Home•A•Syst for Hawaii) of the University of Hawaii College of Tropical Agriculture and Human Resources (UH-CTAHR) and the USDA Cooperative Extension Service (USDA-CES). Funding for the program is provided by a U.S. EPA 319(h) grant administered by the Hawaii State Department of Health.